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# What is OneGeology in 2015?

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# Presentation Outline

- **Background** – quick OneGeology history
- **Consortium** – The vehicle to achieve the goal
- **Current status –** Where we are in relation to goals
- **Conclusions** and **way forward**

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# Background

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# Background

- Initiated in 2007 by Geological Survey Organisations from around the globe: national and state/provincial/territorial
- Voluntary initiative / no financial obligations for participants
- It worked perfectly for several years

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# Achievements

- OneGeology has been a profound success for the geosciences
- It has more than delivered on all of its original goals
- It has raised the level of geological survey information delivery across the world
- It has spawned many projects and initiatives across the world, some very large (i.e. OneG-E and GIN)
- It has made geology a global leader in the field of SDI & an exemplar of a scientific community working together

# Background

- BGS & BRGM funded (and still are) 1G substantially from their budgets
- The challenges nowadays are:
  - Achieving long-term sustainability
  - Bringing together a wider geoscience community & serving richer and larger variety of geoscience data
  - Following IT & GIS developments on a global scale
- How can we achieve that?
- A feasible and sustainable solution is needed!

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# Consortium

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# OneGeology Consortium

- In Oct 2013 OneGeology Consortium was formed with:
  - a clear governance structure,
  - formally defined rules,
  - membership commitments,
  - ambitious objectives, and
  - With a target to achieve sustainability until 35th IGC in Cape Town (August 2016)!

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# OneGeology Consortium

- Currently there are 138 Members, 19 Principal Members, 2 Corporate M., 2 supporting Internl. Organisations (IUGS, AAGS)
- Also formally supported by UNESCO, IUGS, ICSU, GEO
- Officially recognised as being ***the*** global model for open geo-data sharing

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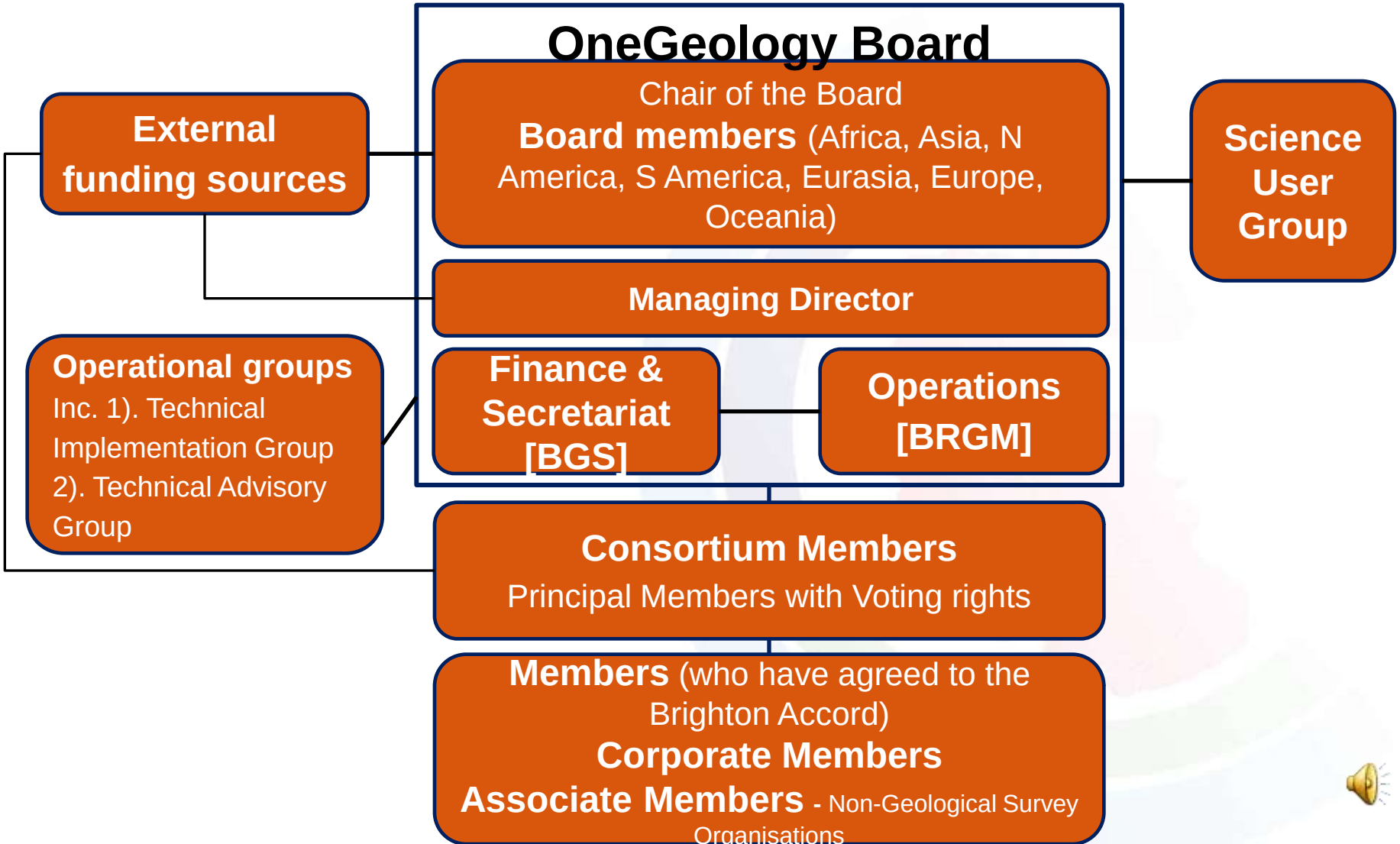
# OneGeology Governance



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# Objectives

1. **To be the provider of geoscience data globally**
2. **To ensure an exchange of know-how and skills so all can participate**
3. **Use of the global profile of OneGeology to increase awareness of the geosciences and their relevance** (in contemporary society)

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# Obligations and benefits of being a member of OneGeology Consortium (1)

- Membership fee:
  - Members 2500/5000€; subject to membership type
  - Corporate Members – subject to negotiation)
- Advisory function in strategic matters
- Contribution & access to the expertise and experience of international geoscientists and informatics experts
- Leverage Members' research, survey and service contribution through its global presence

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# Obligations and benefits of being a member of OneGeology Consortium (2)

- Build upon 20+ years of geo-IT and web development (state-of-the-art) expertise
- Distributed dynamic system – serving the data by data provider or using a “buddy” survey
- Use of open global GeoInformation standards (WMS and WFS) to various topics
  → facilitating the cross-border/global analyses / modelling…

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# Current status

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# OneGeology is an operational system – *it is not an experiment*

- Internet portal and catalogue allow discover, view, zoom, pan, interrogate, download…. and transfer to Google, or wherever
- Many data services: over 300 national and state geological maps
- Help desk and extensive easy to use documentation
- Users in research, education and commerce
- 25 million visitors globally since launched
- Awarded by Geospatial Worl Forum in 2012 for the Excellence in Geospatial Standards Implementation

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# OneGeology Portal – one-stop-shop

ONE Geology

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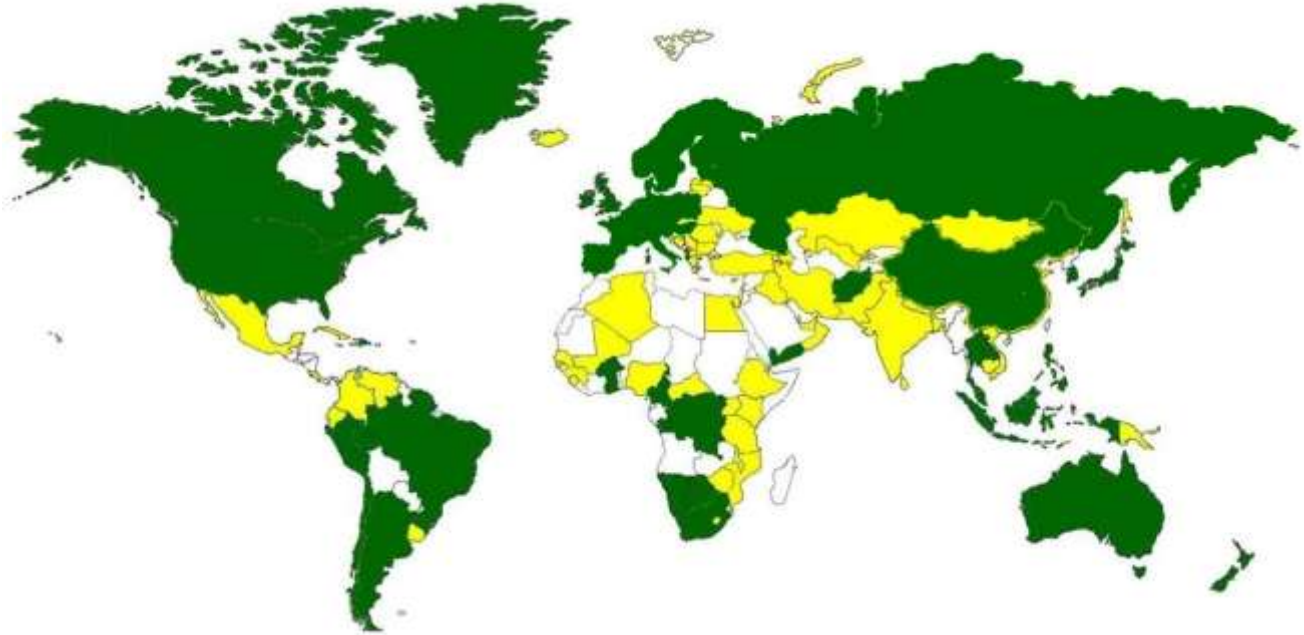
# To be the provider of geoscience data globally



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# Highlights

- 138 organisations from 119 nations now participating
- 127 OGC WMS delivering +300 layers by 70 surveys (national & state)
- State-of-the-art portal developed and regularly upgraded
- Productive partnerships with CGMW and ISCGM
- Data used by researchers, education, industry, and international agencies
- **Improvements needed**
- More geo-data owners serving their data
- More geo-data owners serving their best data

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# To ensure an exchange know-how and skills

- **Highlights**
- Skills to create digital geological spatial data and make it web accessible transferred across the world
- Cookbooks, email and web support developed
- Workshops and courses held in several continents
- Partnerships with UNESCO, CGMW, YES, IUGS
- **Improvements needed**
- Much more to be done – challenge with limited resources
- Better understanding of the challenges faced by the developing world (and sometimes the so-called developed world)

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# Use the 1G profile to increase awareness of the geosciences and their relevance

- **Highlights**
- Massive media attention and public interest (millions!)
- Huge external technical interest ‘000s of presentations given & posters & papers written
- Acknowledged as ***the*** IYPE and IUGS flagship initiative
- Partnerships with Geoparks, UNESCO, YES
- OneG4kids ☺
- **Improvements needed**
- Fully capitalised PR potential is yet to be achieved
- More effort to outreach and communication in OneGeology – it will tangibly improve outcomes

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# Accelerate interoperability and scientific consistency

- **Highlights**
- Success of 1G-EU and USA-GIN
- Encouraging use of open global standards (WMS, WFS) – all data at 1G-Portal now GeoSciML3.2 compliant
- The Accreditation Scheme
- Active contributor to IUGS,GEO/GEOSS,INSPIRE,OGC
- Working with ESRI to emplace standards in ArcGIS
- **Improvements needed**
- Geological community using basic geological standards that would make data much more useful for all (changing)
- Standards and IT management is not popular nor appealing (no SCI points)

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# Which additional service could OneG include?

- Inclusion of papers from conferences and journals, and different reports (i.e. IGCP project results)
- Inclusion of raw geoscience data provided by researchers worldwide
- Inclusion of 3D geological data
- Inclusion of other geological thematic data
- <u>All georeferenced and interoperable!!!</u>

# Conclusions & way forward…

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# Why is OneGeology working?

- Short simple mission and vision: 3 simple objectives
- Uncomplicated plan: start simple and build up
- Inclusivity: all geoscience institutions welcome
- Minimal intrusion into local systems
- A “buddy” system to help those who need it
- Distributed system
- Geologists working together & learning from each other's experience

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Data providers need/want/have to share their geoscience data

**OneGeology makes it happen**

End-users need/want the reliable access to the geoscience data (in one place and updated in the best possible way)

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**OneGeology is about sharing geoscience data**

**Sharing is essential to the future of all multi-disciplinary science and industry**

**Data availability is essential to achieving the optimal application of geoscience data for the benefit of the sustainable societal progress**

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**Thanks to all the contributors to OneGeology, to all GSO and to their teams for devoted work!**

**Thank you for your @10tion!**

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